

IN THE CLAIMS:

1. (Amended) An apparatus for extracting a sample from a strip of material, said apparatus comprising:

a roller having a periphery surface;

a cutting wheel having [a] at least one cutting die extending from its periphery[; and wherein said], the material strip capable of advancing [advances] between said roller and said cutting wheel, said cutting wheel rotating in coordinated relation to the advance of said material strip, said cutting wheel rotating into a position wherein said cutting die engages said material strip and rotates through engagement with said periphery surface of said roller thereby extracting a sample from said material strip; and

a conveyor including a strip of material which passes through a testing mechanism and arranged to act as a conveyer belt, the sample disposed between the strip of material and a second strip of material upstream of the testing mechanism, and are in turn conveyed to the testing mechanism and removed from the testing mechanism by intermittent activation of strip drive means.

2. (Original) The apparatus of claim 1 wherein said periphery surface of said roller is hardened so as to withstand repeated engagement with said cutting die.

3. (Amended) The apparatus of claim 2 wherein said periphery surface is coated with a generally non-adhesive substance [so that] inhibiting said strip of material [does not adhere] from adhering to said periphery surface of said roller during extraction of said sample.
4. (Amended) The apparatus of claim [3] 2 wherein [said] the hardened periphery surface of said roller comprises steel.
5. (Originally Presented) The apparatus of claim 1 wherein said cutting wheel has a plurality of cutting dies extending from its periphery.
6. (Amended) The apparatus of claim 1 wherein said cutting die comprises:
[A] a hollow body connected at one end to the periphery of said cutting wheel and open at [the] an opposite end thereof, wherein said sample is retained within said hollow body after extraction from said strip.
7. (Amended) The apparatus of claim 6 [further comprising a] where said cutting die further comprises an ejector [means] located within said hollow body [so that engagement of said ejector means forces] configured to selectively eject said sample out of said hollow body.
8. (Amended) The apparatus of claim 7 wherein said ejector [means] comprises an ejector pin located within said hollow body [for forcing said sample out of said opening during actuation thereof].

9. (Amended) An apparatus for extracting a sample from a strip of material, said apparatus comprising:

a roller [having an axis of rotation x and a hardened periphery surface];

a cutting wheel having [an axis of rotation y that is coplanar to said axis of rotation x]; a cutting die extending [from the periphery of said cutting wheel] therefrom, said cutting die comprising a generally hollow body connected at one end to [the periphery of] said cutting wheel and open at [the] an opposite end thereof the cutting wheel and roller arranged to selectively extract ; wherein said material strip advances between said roller and said cutting wheel, said cutting wheel rotating in coordinated relation to the advance of said material strip, said cutting wheel rotating into a position wherein said open end of said cutting die engages said material strip and rotates through engagement with said hardened periphery surface of said roller thereby extracting a the sample from said material strip and [retaining] retain said sample within said hollow body; and

a conveying system disposed between a testing apparatus and the sample, said conveying system including first and second strips of material configured to support said sample therebetween and convey said sample to said testing apparatus.

10. (Original) The apparatus of claim 9 wherein said cutting die is removably mounted to said cutting wheel to permit cutting dies of various shapes, sizes, and configurations to be used to extract samples.

11. (Amended) The apparatus of claim 9 further comprising at least one sample retaining pin located within said hollow body and connected at one end to said cutting wheel, said at least one sample retaining pin [piercing] configured to pierce said sample during the extraction thereof and [holding] hold said sample within said hollow body by frictional engagement during rotation of said cutting wheel.

12. (Amended) The apparatus of claim 9, further comprising a second cutting die extending from [the periphery of] said cutting wheel [to extract a second sample from said material strip during a single revolution of said cutting wheel].

13. (Original) The apparatus of claim 12 wherein the first die is laterally offset a distance from the center of the cutting wheel periphery so that the first sample is extracted off-center from said material strip of given width.

14. (Original) The apparatus of claim 13 wherein said second cutting die is laterally offset a distance from the center of the cutting wheel periphery opposite that of said first die so that said second sample is extracted off-center from said material strip of given width.

15. (Amended) The apparatus of claim 14, wherein [said] the first and second cutting dies are located 90 degrees apart on the periphery of said cutting wheel so that the samples taken from a material strip of given width are staggered along the length thereof.

16. (Cancelled)

17. (Amended) The apparatus of claim [16] 23, wherein said means for ejecting the sample is located within said cutting die so that engagement of [said] the ejector means forces said sample out of said cutting die and onto said [conveying means] conveyor.

18. (Amended) The apparatus of claim [17] 23, wherein said ejector means comprises an ejector pin located within said cutting die, that when actuated, forces said sample out of said cutting die.

19. (Amended) The apparatus of claim [16] 23, wherein said [means for conveying said sample] conveyor comprises a strip of film material which passes through said testing mechanism and is arranged to act as a conveyer belt, samples to be tested are located on the film material upstream of the testing mechanism, and are in turn conveyed to the testing mechanism and removed from the testing mechanism [by intermittent activation of film strip drive means].

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (New) An apparatus for extracting a sample from a material strip and testing properties of said sample, said apparatus comprising:

a roller having a peripheral surface;

a cutting wheel having a cutting die extending from its periphery;

wherein said material strip advances between said roller and said cutting wheel, said cutting wheel rotating into a position wherein said cutting die engages said material strip and rotates through engagement with said peripheral surface of said roller thereby extracting the sample from said material strip;

means for ejecting said extracted sample from said cutting die;

a testing mechanism; and

a conveyor disposed between said testing mechanism and said extracted sample, said conveyor including first and second strips of material configured to sandwich said sample and convey said sample to said testing mechanism.

24. (New) An apparatus for extracting a sample from a material strip and testing properties of said sample, said apparatus comprising:

a roller having a peripheral surface;

a cutting wheel having a cutting die extending from its periphery;

wherein said material strip advances between said roller and said cutting wheel, said cutting wheel rotating into a position wherein said cutting die engages said material strip and rotates through engagement with said peripheral surface of said roller thereby extracting the sample from said material strip;

an ejector configured to eject said extracted sample from said cutting die;

a conveyor support arrangement including support for a first source of conveyor material and support for a second source of conveyor material above the first source, the support for the first source configured to permit a supply of conveyor material supporting the sample to proceed to a testing location, the support for the second source configured to permit a second supply of conveyor material to overlap the sample prior to reaching the testing location.